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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/584,232 | 04/20/2007 | Wataru Nishiumi | 71,051-038 | 9848 |
| 27305 | 7590 | 03/08/2010 | | |
| HOWARD & HOWARD ATTORNEYS PLLC 450 West Fourth Street Royal Oak, MI 48067 | | | EXAMINER PENG, KUO LIANG | |
| | | | ART UNIT 1796 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/584,232

Applicant(s)

NISHIUMI ET AL.

Examiner

Kuo-Liang Peng

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/16/09 Amendment.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. The Applicants' amendment filed November 16, 2009 is acknowledged. Claims 3, 7-8 and 14-15 are amended. Claim 22 is deleted. Now, Claims 1-21 are pending.
2. Specification objection(s) in the previous Office Action (Paper No. 20090810) is/are removed.
3. Claim objection(s) in the previous Office Action (Paper No. 20090810) is/are removed.
4. Claim rejection(s) under 35 USC 112 in the previous Office Action (Paper No. 20090810) is/are removed.
5. Claim rejection(s) under 35 USC 103 in the previous Office Action (Paper No. 20090810) is/are removed.
6. The indicated allowability of Claims 12 and 20-21 is withdrawn in view of the newly discovered reference(s) to Nagaoka (US 5 378 406). Rejections based on the newly cited reference(s) follow.

Specification

7. The disclosure is objected to because of the following informalities:
- The amended Table 1 only shows portion of the original Table 1.
- Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 7-8 and 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 7, "further" (line 1) causes confusion. Applicants are advised to remove "further", and at the end of Claim 7, after component (D), insert – (E) 0.001 – 0.05 wt% of a bis (2-pyridylthio-1-oxide) non-ferrous metal salt -

–.

For Claims 15-18, it is not clear as to what Applicants intend to claim, i.e., a “discoloration inhibiting or reducing agent” or a “diorganopolysiloxane composition”. Examiner notes that the claimed amount of the bis(2-pyridylthio-1-oxide) is **meaningless**, since the amount is based on a diorganopolysiloxane composition that is merely for **intended** use.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-4, 6-9, 10, 12-13, 15 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagaoka (US 5 378 406).

Nagaoka discloses a polyorganosiloxane composition comprising components A) to D). (col. 2, line 29 to col. 3, line 15). Component A) is a polydiorganosiloxane end-capped with **silanol** or **alkoxy** groups. (col. 3, lines 23-33) Component B) is an alkoxysilane, etc. (col. 4, line 4 to col. 5,

line 50 and Examples) Component D) is a bis(3-pyridylthio-1-oxide) zinc salt, and the amount of which can be **0.001 to 25** parts by weight, preferably from **0.01 to 1** part by weight. (col. 6, lines 58-65) Thus, one of ordinary skill in the art would **immediately envisage** the claimed amount of the bis(2-pyridylthio-1-oxide) non-ferrous metal salt with **sufficient specificity** at least for the ranges overlapped with that of the presently claimed invention, since Nagaoka's examples further demonstrate the employment of component D) in an amount of **0.1** part by weight, which is located at the far lower portion of the foregoing ranges. The composition can further contain fillers such as calcium carbonate and iron oxide. (col. 7, lines 27-57) Since both fillers are present in Nagaoka's composition, the calcium carbonate contains the iron oxide and *vice versa*. A curing catalyst such as an organotitanium compound, etc. can be present. (col. 7, lines 7-21)

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 5, 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagaoka in view of Insley (US 3 995 184).

Nagaoka discloses a polyorganosiloxane composition comprising components A) to D), *supra*, which is incorporated herein by reference. Nagaoka is silent on the use of iron (II) oxide. However, Nagaoka's iron oxide is employed for imparting electrical conductivity to the composition. (col. 7, lines 41-46) Furthermore, Insley teaches that FeO (iron (II) oxide) is far more electrically conductive than those iron oxides having higher oxidation states, such as Fe₂O₃. (col. 3, lines 30-45) Examiner further notes that an iron oxide is typically represented in one of three forms, i.e., FeO, Fe₂O₃ or Fe₃O₄. As such, one of ordinary skill in the art would know that the use of FeO as the iron oxide would have yielded the **PREDICTABLE** result of enhancing the electrical conductivity. Therefore, it would have been obvious to utilize the FeO in Nagaoka's composition with expected

success. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007)

14. Claims 14 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagaoka in view of Insley (US 3 995 184).

Nagaoka discloses a polyorganosiloxane composition comprising components A) to D), *supra*, which is incorporated herein by reference. Nagaoka further teaches the composition as a two part type. (col. 8, lines 11-26) Nagaoka is silent on the claimed two part composition. However, since concerning the bis(2-pyridylthio-1-oxide) nonferrous salt and the ferrous oxide of Nagaoka, there are only four options for their inclusion in the two part composition – either together or separately with or without a diorganopolysiloxane polymer, motivated by the desire to find the combination that generates the best stable composition, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed various two part type compositions of the invention of Nagaoka, including those wherein the bis(2-pyridylthio-1-oxide) and the ferrous oxide powder are in separate parts of the composition, each with a

diorganopolysiloxane polymer by routine experimentation with an expectation of success.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck, can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp
March 3, 2010

/Kuo-Liang Peng/
Primary Examiner, Art Unit 1796